

### Abstract

By means of a method or device for nozzle jetting of oxygen into a synthesis reactor, e.g. for oxi-dehydration, with mainly radial flow of the gas mixture through a catalyser packing, it is intended to significantly improve the entry and mixing of oxygen before entering into the catalyser, particularly for the oxi-dehydration method.

This is achieved, in that the oxygen is added to a ring distributor system in pure form, as air or mixed with inert gas or water vapour, and is then jetted on to the catalyser surface through several exit openings in the ring distribution system at an angle to the vertical.

Please also refer to the drawing: 2